WE CLAIM:

- 1. A heat sink for a luminaire, said heat sink comprising:
- a first piece having at least two coupling points; and
- a second piece having at least two coupling points, said second piece coupled to said first piece at said respective two coupling points; wherein:

said first and second pieces are operative to be tightened at said coupling points against an object positioned between said first and second pieces.

- 2. The heat sink of claim 1 wherein said first and second pieces have a space between each other through which an electrical wire can pass.
- 3. The heat sink of claim 1 wherein said coupling points are operative to receive respective fasteners.
- 4. The heat sink of claim 1 wherein at least one of said first and second pieces has at least one exterior screw track.
- 5. The heat sink of claim 1 wherein said first and second pieces each have a semicircular profile shape such that said coupled first and second pieces form a hollow, open-ended cylindrically shaped structure.
- 6. The heat sink of claim 5 wherein said first and second pieces each has a first flange extending from one side of said semicircular shape and a second flange extending from the other side of said semicircular shape.

- 7. The heat sink of claim 6 wherein each said flange comprises one said coupling point, said coupling point having an opening sized to receive a fastener, said openings on said first piece flanges aligned with respective said openings on said second piece flanges when said first and second pieces are coupled together to form said hollow cylindrically shaped structure.
- 8. The heat sink of claim 1 wherein said coupled first and second pieces are sized to be tightened against a lamp socket positioned between them.
- 9. The heat sink of claim 1 wherein said first and second pieces are thermally conductive.
- 10. The heat sink of claim 1 wherein said first and second pieces are made from extruded material.
- 11. The heat sink of claim 1 wherein said first and second pieces comprise extruded aluminum.
- 12. A heat sink for a luminaire, said heat sink comprising:

a first piece having a semicircular profile shape and two screw tracks extending parallel to each other along an exterior surface of said first piece, said first piece having a first flange extending from one side of said semicircular shape and having a second flange extending from the other side of said semicircular shape, each said flange having a notch there through to receive a fastener; and

a second piece having a semicircular cross-sectional shape and two screw tracks extending parallel to each other along an exterior surface of said second piece, said second piece having a first

flange extending from one side of said semicircular shape and having a second flange extending from the other side of said semicircular shape, each said flange having a notch there through to receive a fastener, each second piece flange notch aligned with a respective first piece flange notch when said first and second pieces are positioned adjacent each other to form a hollow cylindrically shaped structure having an opening sized to receive a luminaire component.

- 13. The heat sink of claim 12 wherein one of said first and second pieces has at least one tapped hole through its semicircular shape for receiving a fastener to act as a stop for a luminaire component received in said cylindrically shaped opening.
- 14. The heat sink of claim 12 wherein said first and second pieces are thermally conductive.
- 15. The heat sink of claim 12 wherein said first and second pieces are extruded material.
- 16. The heat sink of claim 12 wherein said first and second pieces are metallic.
- 17. The heat sink of claim 1 wherein said first and second pieces are extruded aluminum.
- 18. The heat sink of claim 1 wherein said fastener comprises a screw.
- 19. A heat sink assembly of a luminaire, said assembly comprising:

an endplate of said luminaire, said endplate comprising an interior surface and an exterior surface of said luminaire;

a first heat sink piece; and

a second heat sink piece coupled to said first heat sink piece to form a hollow structure having

two opposite ended openings, said hollow structure operative to receive and be tightened against a lamp socket; wherein

said first and second pieces are in physical contact with said endplate.

- 20. The assembly of claim 19 further comprising a plurality of fasteners that couple said first and second heat sink pieces together and that attaches said first and second pieces to said endplate.
- 21. The assembly of claim 19 further comprising a lamp socket inserted in said hollow structure.
- 22. The assembly of claim 19 wherein said hollow structure has a space between said first and second pieces along a side of said structure to allow electrical wiring to pass through.
- 23. The assembly of claim 19 wherein said hollow structure has a stop to prevent insertion of a lamp socket beyond a certain point.
- 24. The assembly of claim 23 wherein said stop is an indentation or a screw in one of said first and second pieces.
 - 25. A luminaire comprising:

first and second endplates;

a reflector positioned between said first and second endplates;

a heat sink attached to one of said endplates, said heat sink comprising:

a first piece, and

a second piece coupled to said first piece to form a hollow structure having an open end; and

a lamp socket held in place between said

first and second pieces of said heat sink; wherein:
said heat sink is in direct physical
contact with said lamp socket and said one endplate and
is operative to be tightened against said lamp socket.

- 26. The luminaire of claim 25 wherein said lamp socket is operative to receive a 1000 watt metal halide lamp.
- 27. The luminaire of claim 25 wherein said heat sink has screw tracks running along exterior surfaces of said first and second pieces, said heat sink attached to said one endplate via screws through said endplate and into said screw tracks
- 28. A method of drawing heat away from a lamp socket of a luminaire, said method comprising:

 contacting a portion of an exterior surface of said lamp socket with a first piece of thermally conductive material;

contacting another portion of said exterior surface of said lamp socket with a second piece of thermally conductive material; and

contacting a thermally conductive structure of said luminaire with said first and second pieces of thermally conductive material, said structure comprising an exterior surface of said luminaire.

- 29. The method of claim 28 further comprising tightening said first and second pieces of thermally conductive material against said portion and said another portion of said exterior surface of said lamp socket.
- 30. The method of claim 28 further comprising fastening said first and second pieces of thermally conductive material to said thermally conductive structure to maintain said contacting of said thermally conductive structure.

- 31. The method of claim 28 wherein said structure is an endplate of said luminaire.
- 32. A method of drawing heat away from a lamp socket of a luminaire, said method comprising:

tightening first and second pieces of thermally conductive material against a lamp socket to ensure direct physical contact between said lamp socket and said first and second pieces;

transferring heat to said first and second pieces; and

transferring heat from said first and second pieces to a thermally conductive structure of said luminaire, said first and second pieces in direct physical contact with said structure, said structure comprising an exterior surface of said luminaire.

- 33. The method of claim 32 further comprising passing electrical wiring between said first and second pieces while said first and second pieces are tightened against said lamp socket.
- 34. The method of claim 32 further comprising providing a removable said first piece to allow said lamp socket to be accessed.
- 35. Apparatus for drawing heat away from a lamp socket of a luminaire, said apparatus comprising: means for securing tight physical contact against a lamp socket;

first means for transferring heat away from said lamp socket; and

second means for transferring heat from said first means to air surrounding said luminaire.